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(54) Title: MODULATION OF CYTOCHROME P-450 REDUCTASE ACTIVITY IN POPPY PLANTS

(57) Abstract: A gene encoding a cytochrome P-450 reductase enzyme involved in an alkaloid biosynthesis pathway of Papaver somniferum is disclosed together with homologues and variants thereof. The enzyme inhibits accumulation of at least one benzylisoquinoline alkaloid above a normal level of the alkaloid in the plant. Transgenic plants and methods of producing same are also disclosed.